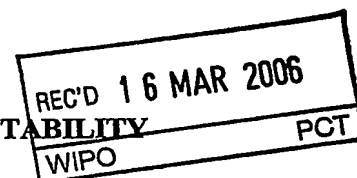


# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference <b>P24675 PC</b>	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. <b>PCT/NO2004/000367</b>	International filing date (day/month/year) <b>30-11-2004</b>	Priority date (day/month/year) <b>08-12-2003</b>
International Patent Classification (IPC) or national classification and IPC <b>See Supplemental Box</b>		
Applicant <b>Börgesen, Are</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
  - a. ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
    - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
    - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
  - b. ☐ (sent to the International Bureau only) a total of \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- |                                               |                                                                                                                                                                 |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report                                                                                                                                             |
| <input type="checkbox"/> Box No. II           | Priority                                                                                                                                                        |
| <input type="checkbox"/> Box No. III          | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability                                                                |
| <input type="checkbox"/> Box No. IV           | Lack of unity of invention                                                                                                                                      |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI           | Certain documents cited                                                                                                                                         |
| <input type="checkbox"/> Box No. VII          | Certain defects in the international application                                                                                                                |
| <input type="checkbox"/> Box No. VIII         | Certain observations on the international application                                                                                                           |

Date of submission of the demand  <b>18-08-2005</b>	Date of completion of this report  <b>08-03-2006</b>
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer  <b>Lena Nilsson / JA A</b> Telephone No. +46 8 782 25 00

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.

PCT/NO2004/000367

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.  
Continuation of: Cover sheet

**International patent classification (IPC)**

**F03B 13/18 (2006.01)**

**F03B 13/26 (2006.01)**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NO2004/000367

## Box No. I Basis of the report

## 1. With regard to the language, this report is based on:



the international application in the language in which it was filed

a translation of the international application into \_\_\_\_\_,  
which is the language of a translation furnished for the purposes of:

international search (Rules 12.3(a) and 23.1(b))



publication of the international application (Rule 12.4(a))



international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

the international application as originally filed/furnished



the description:

pages 1 - 6 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_



the claims:

pages \_\_\_\_\_ as originally filed/furnished

pages\* \_\_\_\_\_ as amended (together with any statement) under Article 19

pages\* 1 - 2 received by this Authority on 30-11-2005

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_



the drawings:

pages 1 - 5 as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_



a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

the description, pages \_\_\_\_\_



the claims, Nos. \_\_\_\_\_



the drawings, sheets/figs \_\_\_\_\_

the sequence listing (*specify*): \_\_\_\_\_any table(s) related to the sequence listing (*specify*): \_\_\_\_\_4. ☐

This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).



the description, pages \_\_\_\_\_



the claims, Nos. \_\_\_\_\_



the drawings, sheets/figs \_\_\_\_\_

the sequence listing (*specify*): \_\_\_\_\_any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/NO2004/000367

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	<u>1-9</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-9</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-9</u>	YES
	Claims		NO

## 2. Citations and explanations (Rule 70.7)

The document US 4170738 A is regarded as being the closest prior art to the subject-matter of claim 1, and shows an energy device powered by the motion of water beneath the waves. This energy device has a submerged sail guided to reciprocate with the movement of the water.

The subject-matter of claim 1 differs from this known US 4170738 A in that at least one submerged sail, while being connected to a transmission element, is displaceable between two magazines, and where the sail, while being stored in the magazines, is unconnected relatively to the transmission element.

Therefore, the subject-matter of claim 1 meets the requirements of the PCT with respect to novelty and inventive step.

A m e n d e d   C l a i m s

1. A tidal power station device (1) including at least one submerged sail (14, 14'), necessary structures (2, 4) and at least one transmission element (10),

5 c h a r a c t e r i z e d   i n   t h a t   t h e   a t   l e a s t   o n e   s u b m e r g e d   s a i l   ( 1 4 ,   1 4 ' ) ,   w h i l e   b e i n g   c o n n e c t e d   t o   t h e   t r a n s m i s s i o n   e l e m e n t   ( 1 0 ) ,   i s   d i s p l a c e a b l e   b e t w e e n   t w o   m a g a z i n e s   ( 1 8 ,   2 0 ) ,   a n d   w h e r e   t h e   s a i l   ( 1 4 ,   1 4 ' ) ,   w h i l e   b e i n g   s t o r e d   i n   t h e   m a g a z i n e s   ( 1 8 ,   2 0 ) ,   i s   u n c o n n e c t e d   r e l a t i v e l y   t o   t h e   t r a n s m i s s i o n   e l e m e n t   ( 1 0 ) .

2. A device in accordance with Claim 1, where the tidal power station comprises a first cage (2) and a second cage (4), at least one belt-like element (10) extending around reversing disks (12) at the respective cages (2, 4), c h a r a c t e r i z e d   i n   t h a t   a t   l e a s t   o n e   s a i l   ( 1 4 ,   1 4 ' )   h a s   a n   a c t i v e   p o s i t i o n   i n   w h i c h   t h e   s a i l   ( 1 4 ,   1 4 ' )   i s   c o n n e c t e d   t o   t h e   b e l t - l i k e   e l e m e n t   ( 1 0 )   a n d   a n   i n a c t i v e   p o s i t i o n   i n   w h i c h   t h e   s a i l   ( 1 4 ,   1 4 ' )   e s s e n t i a l l y   r u n s   f r e e l y   w i t h   r e s p e c t   t o   t h e   b e l t - l i k e   e l e m e n t   ( 1 0 ) .

3. A device in accordance with Claim 2, c h a r a c t e r i z e d   i n   t h a t   t h e   s a i l   ( 1 4 ,   1 4 ' )   i s   c o n n e c t e d   t o   t h e   b e l t - l i k e   e l e m e n t   ( 1 0 )   b y   a t   l e a s t   o n e   l o c k a b l e   g u i d e   ( 1 6 ) .

- 25 4. A device in accordance with Claim 2, c h a r a c t e r i z e d   i n   t h a t   t h e   s a i l   ( 1 4 ,   1 4 ' )   i s   p r o v i d e d   w i t h   a   h i n g e   s h a f t   ( 2 2 ) .

5. A device in accordance with Claim 1, c h a r a c t e r i z e d   i n   t h a t   a   n u m b e r   o f

sails (14, 14') in their starting position are located in a first magazine (18).

6. A device in accordance with Claim 5,  
c h a r a c t e r i z e d i n that the sails (14,  
14') are fed out sequentially from the first magazine  
(18) or a second magazine (20).

7. A device in accordance with Claim 6,  
c h a r a c t e r i z e d i n that the output  
spacing between the sails (14, 14') is determined by the  
length of a distance line (26).

8. A device in accordance with Claim 6,  
c h a r a c t e r i z e d i n that adjacent sails  
(14, 14') are interconnected by means of a locking  
device (24) when located in the magazine (18, 20).

9. A device in accordance with Claim 6,  
c h a r a c t e r i z e d i n that the distance  
line (26) is arranged so as upon tensioning to release  
the locking device (24) associated with the two adjacent  
sails (14, 14').